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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,662	08/29/2003	Joseph E. Hoot JR.	84,487	7784

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EXAMINER	
BRAHAN, THOMAS J	
ART UNIT	**PAPER NUMBER**
3652	

DATE MAILED: 07/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/650,662	HOOT ET AL.	
	Examiner	Art Unit	
	Thomas J. Brahan	3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The drawings are objected to under 37 C.F.R. § 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the grid sensor array of claims 4, 5, and 7, must be shown, or the feature must be canceled from the claims. No new matter may be entered. It is also suggested that better drawings be submitted.

2. The following is a quotation of the first paragraph of 35 U.S.C. § 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The structure of the sensors is not understood. How are they mounted on plates as to form a sensing grid? Why does figure 5 show the sensor grids or arrays (48) as at a pair of points spaced from the platform?

4. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which applicant regards as his invention.

5. The following is a quotation of the sixth paragraph of 35 U.S.C. § 112:

> An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

6. Clams 1-7 are rejected under 35 U.S.C. § 112, second and sixth paragraphs, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, and as including an improper means plus function type limitation.

a. In claim 1, line 3, the term "table means" renders the claim indefinite as being an improper means plus function type limitation. It is unclear as to what would or would not be considered as a "table means". As "table" is not a function, it cannot be used in a means plus function type limitation.

b. In claims 3 and 6, the limitation "in 90° related directions" fails to specify the item or items having the relationship, i.e. does this mean that the screw drives are at 90° to each other or to another element?

7. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be

negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

8. Claims 1 and 5, as best understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Makino in view of Montgomery et al. Makino shows the basic claimed combination of a platform with positioning means (25) for alignment of a vehicle (23). It varies from the claims by not having sensors for automatically positioning the vehicle. Montgomery et al shows a similar positioning system with "table means" (E) which have adjustable lengths (by moving sections E52-E56) and are controlled by sensors (K). It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the platform of Makino by having its vehicle positioned with "table means" which are adjustable in overall length to accommodate container loads of the different standard lengths, with automatic adjustment based on sensor controls, as taught by Montgomery et al. The sensors of Montgomery et al are considered as forming a sensor grid, see column 11, lines 24-44, and would be considered as mounted on spaced plates, as both references have the platforms formed of spaced plates, as the sensor mounting structure of claim 5 is best understood.

9. Claim 2, as best understood, is rejected under 35 U.S.C. § 103(a) as being unpatentable over Makino in view of Montgomery et al, as applied above to claim 1, and further in view of Bratlie. Makino, as modified, shows the basic claimed combination of a platform for positioning a load vehicle, but varies from the claims by not having the ramp (21) hinged to the platform. Bratlie shows a similar load platform which has ramps (144 and 146) pivotally mounted to the platform to fold up for storage during transport, see column 6, lines 21-25. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the platform of Makino by having its ramps hinged to the platform, as to fold up to a storage position for transport, as taught by Bratlie.

10. Claims 3 and 4, as best understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Makino in view of Montgomery et al and Bratlie, as applied above to claim 2, and further in view of Coblentz. Makino, as modified by Montgomery et, shows the basic claimed combination of a platform for positioning a load vehicle, but varies from the claims as Montgomery uses hydraulic cylinder (90 and 91) between the three "table means" instead of ball screw drives. Coblentz shows a similar load positioning device with a rotator (51) with hydraulic actuators, and teaches that electric ball screws and pneumatic systems are equivalents thereto, see column 11, lines 45-51. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to use electric ball screws on the positioning platform of Makino instead of hydraulic actuators, as ball screw drives and hydraulic cylinders are art recognized equivalents, as taught by Coblentz. The screw drives are at 90° as related to the movements of the crane spreader. The sensors of Montgomery et al are considered as forming a sensor grid and as mounted on spaced plates, as the sensor mounting structure of claim 4 is best understood.

11. Claims 3 and 4, as best understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Makino in view of Montgomery et al and Bratlie, as applied above to claim 2, and further in view of Merkle et al. Makino, as

modified by Montgomery et, shows the basic claimed combination of a platform for positioning a load vehicle, but does not show actuators that are at 90° to each other. Merkle et al shows a similar vehicle positioning platform with electric or hydraulic motors (11 and 12) at 90° to each other. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to provide the positioning platform of Makino with additional actuators at 90° to actuators (90 and 91) for lateral as well as longitudinal position adjustments, as taught by Merkle et al. As Merkle et al uses electric motors, the use of electric ball screws would have been an obvious design consideration, within the limits of routine skill in the art at the time the invention was made by applicant. The sensors of Montgomery et al are considered as forming a sensor grid and as mounted on spaced plates, as the sensor mounting structure of claim 4 is best understood.

12. Claims 6 and 7, as best understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Makino in view of Montgomery et al, as applied above to claim 1, and further in view of Coblentz. Makino, as modified by Montgomery et, shows the basic claimed combination of a platform for positioning a load vehicle, but varies from the claims as Montgomery uses hydraulic cylinder (90 and 91) between the three "table means" instead of ball screw drives. Coblentz shows a similar load positioning device with a rotator (51) with hydraulic actuators, and teaches that electric ball screws and pneumatic systems are equivalents thereto, see column 11, lines 45-51. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to use electric ball screws on the positioning platform of Makino instead of hydraulic actuators, as ball screw drives and hydraulic cylinders are art recognized equivalents, as taught by Coblentz. The sensors of Montgomery et al are considered as forming a sensor grid and as mounted on spaced plates, as the sensor mounting structure of claim 7 is best understood.

13. Claims 6 and 7, as best understood, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Makino in view of Montgomery et al, as applied above to claim 1, and further in view of Merkle et al. Makino, as modified by Montgomery et, shows the basic claimed combination of a platform for positioning a load vehicle, but does not show actuators that are at 90° to each other. Merkle et al shows a similar vehicle positioning platform with electric or hydraulic motors (11 and 12) at 90° to each other. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to provide the positioning platform of Makino with additional actuators at 90° to actuators (90 and 91) for lateral as well as longitudinal position adjustments, as taught by Merkle et al. As Merkle et al uses electric motors, the use of electric ball screws would have been an obvious design consideration, within the limits of routine skill in the art at the time the invention was made by applicant. The sensors of Montgomery et al are considered as forming a sensor grid and as mounted on spaced plates, as the sensor mounting structure of claim 7 is best understood.

14. McMorran et al, Nakagawa et al and Hung are cited as showing related loading platforms with alignment sensors.

15. An inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Brahan whose telephone number is (571) 272-6921. The examiner's supervisor, Ms. Eileen Lillis, can be reached at (571) 272-6928. The fax number for all patent applications is (703) 872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status

information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Questions regarding access to the Private PAIR system, should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6/15/05

Thomas J. Brahan
Primary Examiner
Art Unit 3652